

Application No.: 09/876,160

Docket No.: 20402-00625-US

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended) A capacitor type of microphone having a microphone output terminal connected to an output line through which a microphone signal is outputted, the microphone comprising:

~~a member for shielding the microphone from electromagnetic waves;~~

a movable electrode vibrating in response to a sound vibration;

a fixed electrode arranged face to face with the movable electrode;

a first amplification means for buffer-amplifying a terminal voltage, ~~the circuit~~ first amplification means being located between the movable electrode and the fixed electrode; and

a second amplification means cascaded to the first amplification ~~circuit~~ means between the microphone output terminal;

a bypass capacitor having one end electrically connected to a signal output terminal of the second amplifying means and having the other end electrically connected to a common output terminal of the second amplifying means, the bypass capacitor operating to bypass a high frequency signal from outside the microphone and the signal output terminal of the second amplifying means being connected to the microphone putout terminal, and

a member for shielding the microphone from electromagnetic waves by surrounding the movable electrode, the fixed electrode, the first amplification means, and the second amplification means.

2. (Currently amended) The microphone according to claim 8, wherein the second amplification circuit includes drive means, in which a power supply to the drive means is configured so that the power is obtained as a constant current from outside the microphone via the output line connected to the microphone output terminal.

3. (Currently amended) The microphone according to claim 8, wherein the second amplification circuit includes drive means, in which a power supply to the drive means is configured so that the power is temporarily obtained for storage through the output line connected to the microphone output terminal according to voltage values and the stored voltage is used when obtaining the power is stopped.

4. (Previously presented) The microphone according to claim 8, wherein the second amplification circuit has an FET (field effect transistor) structured into a gate-common amplification circuit, the FET having a source electrode receiving an output current of the first amplification circuit and current from a drain electrode of the FET passing the microphone output terminal.

5. (Previously presented) The microphone according to claim 8, wherein the second amplification circuit has a junction type of transistor structured into a base-common amplification circuit, the transistor having an emitter receiving an output current of the first amplification circuit and current from a collector of the transistor passing the microphone output terminal.

Application No.: 09/876,160

Docket No.: 20402-00625-US

6. (Previously presented) The microphone according to claim 4, wherein the gate of the FET is connected to a common output terminal of the first amplification circuit, the source electrode of the FET receiving the output current of the first amplification circuit and current from the drain of the FET passing the microphone output terminal.

7. (Previously presented) The microphone according to claim 8, wherein each of the first and second amplification circuit has an FET (field effect transistor).

8. (Currently amended) A capacitor type of microphone having a microphone output terminal connected to an output line through which a microphone signal is outputted, the microphone comprising:

- ~~a member for shielding the microphone from electromagnetic waves;~~
- a movable electrode vibrating in response to a sound vibration;
- a fixed electrode arranged face to face with the movable electrode;
- a first amplification circuit for buffer-amplifying a terminal voltage, the first amplification circuit being located between the movable electrode and the fixed electrode; and
- a second amplification circuit cascaded to the first amplification circuit between an output terminal of the first amplification circuit and the microphone output terminal;
- a bypass capacitor having one end electrically connected to a signal output terminal of the second amplifying circuit and having the other end electrically connected to a common output terminal of the second amplifying circuit, the bypass capacitor operating to bypass a high frequency signal from outside the microphone and the signal output terminal of the second amplification circuit being connected to the microphone putout terminal; and
- a member for shielding the microphone from electromagnetic waves by surrounding the movable electrode, the fixed electrode, the first amplification circuit, and the second amplification.

9. (Previously presented) The microphone according to claim 2, wherein the second amplification circuit has an FET (field effect transistor) structured into a gate-common amplification circuit, the FET having a source electrode receiving an output current of the first amplification circuit and current from a drain electrode of the FET passing to the microphone output terminal.

10. (Previously presented) The microphone according to claim 9, wherein the gate of the FET is connected to a common output terminal of the first amplification circuit, the source electrode of the FET receiving the output current of the first amplification circuit and the drain current of the FET passing the microphone output terminal.

11. (Currently amended) A capacitor type of microphone having a microphone output terminal connected to an output line through which a microphone signal is outputted, the microphone comprising:

- ~~a member for shielding the microphone from electromagnetic waves;~~
- a movable electrode vibrating in response to a sound vibration;
- a fixed electrode arranged face to face with the movable electrode;

Application No.: 09/876,160

Docket No.: 20402-00625-US

a first amplification circuit for buffer-amplifying a terminal voltage, the first amplification circuit being located between the movable electrode and the fixed electrode; and

a second amplification circuit cascaded to the first amplification circuit between an output terminal of the first amplification circuit and the microphone output terminal and formed to have an FET (field effect transistor) of which gate is grounded to form a gate-common transistor circuit; and

a bypass capacitor having one end electrically connected to a signal output terminal of the second amplification circuit and having the other end electrically connected to a common output terminal of the second amplification circuit, the bypass capacitor operating to bypass a high frequency signal from outside the microphone and the signal output terminal of the second amplification circuit being connected to the microphone putout terminal; and

a member for shielding the microphone from electromagnetic waves by surrounding the movable electrode, the fixed electrode, the first amplification circuit, and the second amplification.

12. (Currently amended) The microphone according to claim 11 12, wherein the second amplification circuit includes drive means, in which a power supply to the drive means is configured so that the power is obtained as a constant current from outside the microphone via the output line connected to the microphone output terminal.

13. (Previously presented) The microphone according to claim 12, wherein the FET of the second amplification circuit has a source electrode receiving an output current of the first amplification circuit and a drain current coming from the FET passing the microphone output terminal.